

REMOVAL ACTION BRANCH

ADMINISTRATIVE RECORD

NEWARK ABANDONED CARGO TRAILER SITE NEWARK, ESSEX COUNTY, NEW JERSEY

Prepared by:

U.S. EPA Region II Technical Assistance Team Roy F. Weston, Inc Major Programs Division Edison, New Jersey

Prepared for:

James D. Harkay, On-Scene Coordinator
U. S. EPA Region II
Removal Action Branch
Edison, New Jersey

November 1993

NEWARK ABANDONED CARGO TRAILER SITE

ADMINISTRATIVE RECORD FILE

CONTENTS

- 1.0 SITE IDENTIFICATION
- 2.0 REMOVAL RESPONSE
- 3.0 PUBLIC PARTICIPATION
- 4.0 TECHNICAL SOURCES AND GUIDANCE DOCUMENTS

NEWARK ABANDONED CARGO TRAILER SITE

ADMINISTRATIVE RECORD FILE

INDEX OF DOCUMENTS

The index of documents contains the following information about each document:

Document #:

Site Code-Section First Page-Section Last Page

Title:

Abstract of Document Contents

Category:

Document Category/Section of Administrative Record File

Author:

Writer and Affiliation

Recipient:

Addressee or Public and Affiliation, if applicable

Date:

When Document was Created or Transmitted

Note: Items in the Administrative Record are for public access, and should be removed from the file only for copying. The cost of reproduction of the documents in the file is the responsibility of the person requesting the copy.

NEWARK ABANDONED CARGO TRAILER SITE ADMINISTRATIVE RECORD FILE LIST OF DOCUMENTS

Document #:

NAC - 1.1001 - 1.1004

Title:

RE: ABANDONED TANKER AND ABANDONED FLATED

TRAILER

Category:

SITE IDENTIFICATION

Author:

Hugh Gallagher

Recipient:

Mr. Wayne Horwitz, Department of Environmental Protection and

Energy

Date:

March 9, 1993

Document #:

NAC - 2.1001 - 2.1018

Title:

Request for a Removal Action at the Newark Abandoned Cargo Trailer

Site ... Action Memorandum

Category:

REMOVAL RESPONSE

Author:

James D. Harkay

Recipient:

George Pavlou

Date:

Sep. 27, 1993

Document #:

NAC - 2.2001 - 2.2005

Title:

Material Safety Data Sheet for Oxalic Acid

Category:

REMOVAL RESPONSE

Author: Recipient:

EXPLO

_ _

N/A

Date:

August 1988

Document #:

NAC - 2.2006 - 2.2009

Title:

Analytical Report for pH analysis

Category:

REMOVAL RESPONSE

Author:

Accutest

Recipient:

Roy F. Weston, Inc.

Date:

July 29, 1993

Document #: NAC - 3.1001 - 3.1006

Title: Community Relations Plan
Category: PUBLIC PARTICIPATION

Author: James D. Harkay

Recipient: N/A

Date: November 1993

Document #: NAC - 3.1007 - 3.1007

Title: Public Notice

Category: PUBLIC PARTICIPATION

Author:

Recipient: N/A

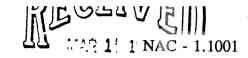
Date:

Document #: NAC - 4.1001 - 4.1001 Title: EPA Regional Guidance

Category: TECHNICAL SOURCES AND GUIDANCE DOCUMENTS

Author: N/A
Recipient: N/A
Date: N/A

Sharpe James Mayor



H3-95

Department of Law

920 Broad Street Newark, New Jersey 07102 (201) 733-3880 Fax (201) 733-5394 Michelle Hollar-Gregory Corporation Counsel

March 9, 1993

Mr. Wayne Horwitz
Assistant Director
Discharge Response Element
Department of Environmental Protection and Energy
461 East State Street
Trenton, New Jersey 08625

RE: ABANDONED TANKER AND ABANDONED FLATBED TRAILER

Dear Mr. Horwitz:

The writer is an attorney who represents the City of Newark in regard to a claim by the C&J Towing Company for storage fees.

At the request of the City of Newark's Police Department the C&J Towing Company towed an abandoned flatbed trailer that was loaded with bags of chemicals on skids. This tow occurred on July 13, 1984.

On September 16, 1986, at the request of the Newark Police Department, a red tanker that had been abandoned on a street in Newark was towed to the C&J Towing Company's lot on Orange Street in Newark, New Jersey.

The tanker had no identification on it in the form of plates or vehicle identification numbers.

These vehicles are still being held by the C&J Towing Company on William Street in Newark.

It is alleged that at least one of these vehicles is the subject of a DEP investigation.

Please see the attached police reports.

I would appreciate it if you would conduct an investigation of this matter and advise the writer if there is a file on either of these vehicles maintained by your office.

Mr. Wayne Horwitz
Assistant Director
Discharge Response Element
Department of Environmental Protection and Energy
March 9, 1993
Page Two

My immediate concern is the appropriate manner to proceed to dispose of the alleged hazardous material on these vehicles.

Any assistance that you render the writer in resolving these matters would be greater appreciated.

Very truly yours,

HUGH GALLAGHER

ASSISTANT CORPORATION COUNSEL

Ifely Gallefor

HG:pr Encls. Office of Emergency Management

Robert D. Swales
Deputy Coordinator

35 Manor Drive Newark, New Jersey 07106 201 733-3660

September 3, 1987

To: Chief Stanley Kossup

From: Robert D. Swales, Deputy Coord.

Re: HAZMAT Incident/ Ca J Towing

139 Orange St.

On September 3, 1987 at 9:50a.m., notified by Fire Hdq. of HAZMAT incident at C&J Towing 139 Orange St. I responded also Hazmat I & Truck I. After checking with owner, he stated that he had a trailer on his property for 3 years and he had notified the Auto Squad. They in turn notified Fire.

Upon investigation of the trailer it contained 800 hags of Oxalic Acid. Notified D.E.P., they responded at 1:30p.m. Further investigation of the trailer found the name of company, Flex Van Service, Gilbert Ave, Secaucus. D.E.P. was going to notify the Company and have them respond and remove the trailer.

very truly-yours,

Robert D. Swales Deputy Coordinator

cc: Director Coleman

RDS/mmb

1. OWERS NAME		1100	j	17/7	12.011	11/10-05
3. DWINER S ATTRESS		NA		13 PFICER'S NO	18961	19/0-35
NA		/	1	7	Arres 7	UNIS 18 RED ON PUB- LIC HOUSING?
4. PERSON REPORTING INCIDENT TO POLICE		S. TELEPHONE NUMBER		TAL REASON	STOLEN DE	STICATION ACCIDENT YES NO
OFFICE OF		6337	,	TOWED SPON	ABANDON: ARM ED VEHICLE ARM (STREET & MUMBER)	ST 0THER 0
ADDRESS OF PERSON REPORTING	Rup	EPA I	ļ	15. IOWED PROM	161 ENC	13th fort
7. HOW REPORTED 8 TIME REPOR	TIED 19 MO	TH DAY	YEAR	16 DAY TOWED	17 TIME	TE LONTH DAY YEAR
	0	/ /3	ION OF VEHIC	1-P1-	1/330	7 /3 84
YEAR NIT MAKE 1800Y TYPE	00/10	DLOA LICENSE PLA			JLL SERIAL NUMBER	JESTIMATED VALUE
Dorsey Tex	PLEN	RED 759-	123	MAINE	DIC 205	25 EPO 18/48
DOORS LOCKED TRUNK LOCKES	1	WINDOWS WINCSHIE		L LEFT FRONT	☐ RIGHT F	PONT LEFT VENT
TYES NO THER DAMAGED PARTS	ATTEMPTED	DAMAGED HEAR DEC	× 2	AEAR	☐ RIGHT =	
BODY DENTS +	5 CRAT	CHET ALL	AROU	WD.		
WHEELS 4 3 2 PTIMES		21 INVENTORY (COMPLETE	SPARE TIRE	UNK /	BUMPERS	I WIPERS ON JE
MAG PAEG A 3 2	16	3 2 1 0	TES		□ 7ES □ ~	
MOTOR YES BATTERY		MTOR	TRANSMISSH		AIR COND YES	MIERCAS INSIDE
NO STRIPPED / ONITION TE		YES NO	TO THE STATE OF TH	∐ NO	STEREO TAPE DECK	PED PRINCE NONE
TES NO NO DAMA	- 1-	REAR NONE	TES	□ №0	TES NO	
PARTS OBVIOUSLY MISSING STRIPPED OR DAMAGED	may Pa	n home or	V/m	ade of	s Kios,	
USTICE CONTINUE APP	22. AL	JTHORIZATION FOR TOWIN	S AT REQUEST			
I REQUEST AND AUTHORIZE THE NEWARK POLICE TO TO MY VEHICLE TO THE OFFICIAL POLICE GARAGE		GNATURE OF OWNERIAGE	i.			
			SE RECEIPT			
CAPT TIME AND DATE CALL 1230 7	13 8	1300 7-13	UY	OF TOW	DOLLY WIN	CH DOTHER
E NATION OF OTHER TYPE OF TOW	1 -0:	01/11/10	SIGN	ATURE OF GARAGE	PLOYEE RECEIVING	CW
- FERVY DUR	1 - 1	24 RECEIPT FOR V	ÆHICLE ON BI	ELEASE	#11/2	
I HEREBY ACKNOWLEDGE RECEIVING	SIGNATURE OF C			STREET ADDRES	S	CITY STATE
THE VEHICLE LISTED ABOVE						
NAME	TAGE TO		ARRESTED		· · · · · · · · · · · · · · · · · · ·	AGE CA NUMBER
				(a)		
26, ADDITIONAL INFORMATION (EXPLAIN REASON FOR						1230 HRS.
VEHICU (TRAKER) TOURD	FOR IA	u vestigation	NORE	COLONCI	C+SCICE	WPATE ORVIN,
ENSIG EST PLEASURED TO	DO HER	t CHARICHS,	CHE	r.Or.		*,
BA WHERE STOLEN?	ATUO ESE	WEN.	10,00			
27. TELETYPE NO. CHOSLIED 1 M CTIMES		17-17	120 51	CHATURE OF OFR	ER MAKING REPORT	ANK BADGE NUMBER
REPORTS D	1-FT .LN 2006] 802	`	1/	mu 11	mis P/0 977
UNE STATUS OF STATEST IN AFFEST IN	NOT .	CLEARED CLEARED	4	ENDINE ENDINE	D PROCES	
22 CLEAPED BY AMPERT OF:	JUVENILE	- NARCOTIC	= 8	ASSIFICATION .	1	NEO-BIFICATION
35. SUPERVISOR APPROVING AND CLASSIFYING	AND ADULT	MOLATOR 36. DATE	37. TA	NLIFED BY.	3 KEY SPICES	TE SO BE VERIFIED BY.
THE WALL	1. al	- 17	CAN	DECED BY	41. FILED BY	17 42 NUMBER OF PAGES
M/ Aurua M	Willen	1/-12	-87	V	AL-UI.	
	7-7-	16	-/1		<u> </u>	MEE DETAILED INSTRUCTIONS

DP__

RECORD BUREAU COPY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II JACOB K. JAVITS FEDERAL BULDING NEW YORK, NEW YORK 10278

DATE:

ISEP 2 7 1993

SUBJECT:

Request for a Removal Action at the Newark Abandoned Cargo Trailer Site, Newark, Essex County, New Jersey

FROM:

James D. Harkay, On-Scene-Coordinator

Removal Action Section B ...

TO:

George Pavlou, Acting Director

Emergency and Remedial Response Division

THRU:

Richard C. Salkie, Associate Director

Emergency and Remedial Response Division

Site ID #: CN

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed removal action described herein for the Newark Abandoned Cargo Trailer Site (Site), Newark, Essex County, New Jersey.

As described in the sections to follow, conditions at the Site meet the criteria for a removal action as stipulated in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

There are no nationally significant or precedent setting issues associated with the proposed response.

II. SITE CONDITIONS AND BACKGROUND

The category of this removal action is time-critical and the CERCLIS ID number for this Site is NJD986652790.

A. Site Description

1. Removal site evaluation

On July 8, 1993, the Director of the New Jersey Department of Environmental Protection and Energy's (NJDEPE) Division of Responsible Party Site Remediation (DRPSR) verbally referred the Site to the United States Environmental Protection Agency (EPA) for removal action consideration under CERCLA. On July 30, 1993, this request was formalized by issuance of a letter which is presented in Attachment A.

On July 23, 1993, the EPA and the Technical Assistance Team (TAT) contractor conducted a Site assessment to identify the contents and potential hazards associated with the abandoned cargo trailer. The trailer was found to contain approximately 800 bags of chemicals. Labels and markings on the cargo trailer were UFCU2176492 Flexi-van FLX2 42987, USA 4310. The bags were labeled oxalic acid manufactured by EXPLOS-Brasil S.A.; the labels were in Spanish.

The cargo trailer is located at the C&J Towing Service Facility (CJTF) and is situated adjacent to many junk cars and associated debris. The rear doors of the box trailer are open and unsecured. Bags of chemicals, located adjacent to the rear doors, have been exposed to rain and sunlight. Exposure to the elements has caused the fabric bags to deteriorate resulting in the potential for direct contact with the chemical and spillage of the chemical on the ground surface.

During the July 23, 1993, Site assessment, a sample of the bagged chemical was collected and sent to a laboratory for pH analysis. The pH of the sample was determined to be 1.2, which confirmed the result of the on-site field pH test. The cargo trailer contains approximately 800 fifty pound bags of chemical. All but 30 bags are in good condition. All bags are labelled "oxalic acid" and appear to be virgin product.

The bags of oxalic acid contained within the abandoned cargo trailer have been determined to be a pollutant or contaminant under CERCLA Section 101 (33) and present an imminent and substantial danger to the public health and the environment.

The Site has been determined to be eligible for a removal action since there has been a release into the environment of a pollutant or contaminant that may present an imminent and substantial danger to public health or welfare (40 CFR 300.400 (a)(2)).

2. Physical location

The Site consists of an abandoned cargo box trailer, currently stored at the CJTS facility, located at 411 Wilson Avenue, Newark, Essex County, New Jersey (see Figure 1). Available Site information indicates that CJTS, under contract with the City of Newark, towed the abandoned trailer from 141 North 13th Street to their former facility, located at 185 Orange Street, Newark on July 13, 1984. Since 1984, CJTS has relocated to 411 Wilson Street, Newark, where the trailer is currently located.

The CJTS facility is bordered by a scrap metal yard approximately 400 feet to the west, the New Jersey Turnpike, approximately 300 feet to the east, an adjoining towing facility to the northwest and vacant land to the north and south. The cargo box is located approximately 600 feet south of the main entrance to the CJTS facility and 30 feet from the eastern fence line.

Site characteristics

The cargo box trailer was discovered abandoned at 141 North 13th Street, Newark, by the Newark Police Department (NPD) on July 13, 1984. The police report indicated the trailer contained approximately 800 bags of chemical and had a Maine license plate. A check on the license plate by the police indicated the trailer was not stolen. On September 3, 1987, the abandoned trailer was investigated by the Newark Hazmat Division at the request of the C&J Towing Company. The Hazmat investigation identified approximately 800 bags of oxalic acid in the trailer. The Hazmat Division referred the incident to the NJDEPE for investigation.

The cargo box trailer is unsecured and accessible to the public. The trailer doors are open and the bags of material at the doorway are exposed to rain and sunlight, which has resulted in the deterioration of the bags and spillage of the oxalic acid to the surrounding area.

A sample of the oxalic acid was sent to a private laboratory which confirmed the pH to be 1.2.

4. Release or threatened release into the environment of a hazardous substance, pollutant, or contaminant

The cargo box contains approximately 800 fifty-pound bags of oxalic acid. The pH of the chemical has been determined to be 1.2. Approximately 30 bags, located near the back door of the trailer, have been exposed to the elements and have deteriorated resulting in spillage of the oxalic acid into the environment.

As defined in CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), the bags of oxalic acid meet the definition of a pollutant or contaminant (Title I Section 101(33).

Inspections of the abandoned trailer have confirmed that the oxalic acid has been released to the environment and based on it's chemical characteristics, the material may present an imminent and substantial danger to the public health or welfare (40 CFR 300.400(a)(2)).

The bags of oxalic acid will further deteriorate through exposure to sunlight, rain, wind and snow and oxalic acid will continue to

be released to the environment. Furthermore, any mechanical disturbance of the cargo box trailer may cause entire bags of the acid to fall onto the ground surface.

5. National Priority List (NPL) status

The Site is not presently, nor is it expected to be listed on the NPL.

6. Maps, pictures and other graphic representations

See Attachment B.

B. Other Actions to Date

1. Previous actions

There have been no previous Federal or private actions taken at the Site, other than those discussed in previous sections of this document.

Current actions

There are no current government or private activities being conducted at this Site.

C. State and Local Authorities' Roles

1. State and local actions to date

On July 30, 1993, the Director of the NJDEPE, DRPSR formally requested EPA assistance to abate the public health and environmental threats posed by the Newark Abandoned Cargo Trailer Site.

No other State or local actions have been taken to date.

2. Potential for continued State/local response

State and local agencies are not able to undertake timely response actions to eliminate the threats posed by the hazardous substances in the trailer. The local government does not have the necessary resources to perform the required action. As a result, there are no actions anticipated or underway by State or local agencies.

III. THREATS TO PUBLIC HEALTH, OR WELFARE, OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Newark Abandoned Cargo Trailer Site meet the requirements of 40 CFR 300.415 of the National Contingency Plan (NCP) for a CERCLA removal action in that there exist:

- (1) Actual or potential exposure to hazardous substances, or pollutants, or contaminants by nearby populations, animals, or food chain [300.415 (b)(2)(i)];
- (2) Hazardous substances, or pollutants, or contaminants in drums, barrels, tanks or bulk storage containers that may pose a threat of release [300.415 (b)(2)(iii)];
- (3) Weather conditions that may cause hazardous substances, or pollutants, or contaminants to migrate or be released [300.415 (b)(2)(v)]
- (4) The unavailability of other appropriate Federal or State response mechanisms to respond to the threatened exposure [300.415 (b)(2)(vi)]

A. Threat to Public Health or Welfare

The oxalic acid in the cargo trailer poses an imminent and substantial danger to public health and welfare through direct contact or ingestion. This material immobilizes calcium in humans and thus disrupts the calcium-potassium ratio in critical tissues and organs, such as the kidneys. As a strong acid, it irritates any tissue it contacts. Ingestion causes burns of the gastrointestinal tract and possibly bleeding and hemetemesis; ingestion of as little as five grams has caused death.

Unauthorized persons accessing the property, as was reported by the C&J Towing Service and disturbing the cargo trailer or entering the rear doors would be exposed to a strong acid. A release of oxalic acid dust into the air could affect workers at the CJTS and potentially impact adjoining businesses through exposure to dust clouds or direct contact. During the assessment, C&J workers were noted working 50 feet from the cargo trailer.

Additionally, the manner in which the material is stored increases the ease in which it can be released. The cargo box doors are open and unsecured. Movement of impounded vehicles around the cargo box by CJTS personnel could result in the accidental disturbance of the cargo box and spillage of the material.

B. Threat to the Environment

The threat to the environment is through the release and migration of a pollutant or contaminant from the Site to surface soils, surface water, wetlands and the atmosphere. The environmental areas are currently threatened and will continue to be threatened until the oxalic acid is contained and removed from the Site.

IV: ENDANGERMENT DETERMINATION

Actual or threatened releases of pollutants and contaminants from this Site, if not addressed by implementing the response action detailed in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

Removal of the oxalic acid for disposal at a Resource Conservation and Recovery Act (RCRA) permitted facility or recycling of the acid into a manufacturing process are feasible options available to mitigate the threat which exists at the Site. Securing the damaged bags of oxalic acid and leaving the chemicals on-site unsecured would merely provide a temporary solution to the threat. When the bags of oxalic acid and any spilled material in the trailer and/or on the ground surface are removed, the threat to human health and the environment will be eliminated.

2. Contribution to remedial performance

The proposed actions are consistent with any long-term cleanup at the Site and are necessary to mitigate the immediate threat from the hazardous substances and will not impede future responses. The removal and disposal of the trailer contents will eliminate the public health and environmental threats posed by the abandoned trailer.

3. Description of alternative technologies

Disposal options for the oxalic acid includes reuse or landfilling. Recycling of the oxalic acid is the most cost-effective disposal option. Landfilling the material would be the second most cost-effective method of disposal. Due to the acidic nature of the material, landfilling may not be possible unless the material is pre-treated (neutralized) prior to disposal.

4. Engineering evaluation/cost analysis

Since this is a time critical removal action, this section does not apply.

5. Applicable or relevant and appropriate requirements (ARARS)

ARARs that are within the scope of this removal action, which pertain to the removal, bulking, transportation and disposal of the oxalic acid, will be met to the extent practicable. Federal ARARs determined to be applicable for this removal action are the RCRA, Hazardous Transportation Act and Occupational Safety and Hazardous Act.

6. Project schedule

Disposal activities could be initiated within one week of approval of the request for fund authorization. Mobilization and removal of the oxalic acid in the cargo trailer, including: repackaging broken bags of material, removal of the intact bags and disposal/reuse of the material is estimated to take six weeks. Demobilization from the Site is estimated to take one week. Barring unforeseen circumstances, the entire project is estimated to take two months to complete.

B. Estimated Costs

A summary of estimated costs for the proposed action is presented below. A detailed cost estimate is included in Attachment C.

EXTRAMURAL COST

Regional Allowance Costs

Total Cleanup Contractor Costs

ERCS Contractor Mobilization Costs	\$ 46,025
Oxalic Acid Disposal	\$ 79,244
Demobilization Costs	\$ 13,131
Subtotal 20% CONTINGENCY	\$138,400 \$ 27,680
TOTAL Regional Allowance Costs	\$166,080

Other Extramural Costs (Not Funded from the Regional Allowance):

Tota	ח ת	ייטעו	CO	ete
IULa		~ :	LU	

Total TAT Costs	
Field Costs (300 hrs. @ \$64/hr.)	\$ 19,200
Office Costs (40 hrs. @ \$46/hr.)	\$ 1,840
Total TAT Costs	\$ 21,040
Subtotal Extramural Costs	\$187,120
15% CONTINGENCY	\$ 28,068
TOTAL, EXTRAMURAL COSTS	\$215,188
Intramural costs	
Direct Costs	
[300 (REGION) + .10 x 300 (HQ)] x \$30	\$ 9,900
Indirect Costs [300 x \$100/HOUR]	\$ 20,700
TOTAL, INTRAMURAL COSTS	\$ 30,680
TOTAL, REMOVAL PROJECT CEILING	\$245,868
TOTAL, REMOVAL PROJECT CEILING (ROUNDED)	\$246,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should actions be delayed or not implemented, oxalic acid will continue to be released into the environment through further deterioration of the packaging fabric, caused by constant exposure to the elements. Towing activities and scrapping of vehicles in the vicinity of the cargo box could increase the potential of release of its contents.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this Site.

VIII. ENFORCEMENT

Enforcement activities at the Site have included the review of documents generated in 1984 and 1987 by the Newark Police Department (NPD) and the Newark Office of Emergency Management (NOEM). EPA has also contacted EXPLOS-Brasil S.A., the manufacturer of the oxalic acid, to obtain information on the chemical. The Company indicated that this lot of material had been sold to a distributor in New Jersey. EPA's review of Hazmat and NPD records revealed that the cargo box was identified as abandoned at 141 North 13th Street, Newark, New Jersey on July 13, 1984. Inspections of the trailer's cargo identified approximately 800 bags of oxalic acid. Investigation of the trailer's license plate and vehicle identification number indicated that the vehicle was owned by Flexi Van Services of Secaucus, New Jersey who leased to a now defunct Company located in Greenland. The leasee was in the process of transporting the oxalic acid to an unknown purchaser when it was abandoned. July 13, 1984, the NPD arranged for the trailer to be towed by C&J Towing Service to CJTS to their storage yard located at 183 Orange Street, Newark, New Jersey.

On September 3, 1987 at the request of the owner of the C&J Towing Service, the NOEM conducted an inspection of the trailer at C&J's Orange Street facility. The Hazmat inspection confirmed the abandoned trailer contained approximately 800 bags of oxalic acid and subsequently referred the incident to the NJDEPE for investigation and/or enforcement. EPA was notified of the incident on July 8, 1993.

Information pertaining to EPA's conversations with EXPLOS-Brasil S.A. is discussed in the Enforcement Addendum of this document.

EPA is not going to initate legal action for this Site by issuing an Administrative Order for a pollutant or contaminant pursuant to Section 106(a), CERCLA, 42 U.S.C. Section 9606 at this time.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Newark Street Abandoned Cargo Box Site, in Newark, Essex County, New Jersey, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the Administrative record for the Site. Site conditions meet the NCP section 300.415(b)(2) criteria for a removal action and I recommend your approval of the proposed removal action.

The project ceiling for this removal action, if approved, will be \$246,000, of which \$166,000 will funded from the Regional removal allowance.

Please indicate your approval and authorization of funding for the Newark Abandoned Cargo Trailer Site, per current Delegation(s) of Authority, by signing below.

APPROVAL:	and and	DATE: 9/27/93	
	George Pavlou, Acting Director	1,	
	Emergency and Remedial Response	Division	
DISAPPROVAL:		DATE:	_
DISAPPROVAL:	George Pavlou, Acting Director	DATE:	_

(after approval is obtained) cc:

- W. Muszynski, RA K. Callahan, DRA
- R. Salkie, ERRD-ADREPP
- G. Zachos, ERRD-RAB
- J. Rotola, ERRD-RAB
- J. Frisco, ERRD-ADNJP
- J. Marshall, OEP
- D. Karlen, ORC-NJSUP
- R. Gherardi, OPM-FIN
- S. Murphy, OPM-FAM L. Miller, NJDEPE
- T. Grier, OS-210
- K. Kloo, NJDEPE
- C. Kelley, TATL

A THECHMENT A

Copy or Smet, George & Bonh

RECEIVED 6

py State of New Jersey

Department of Environmental Protection and Energy

Division of Responsible Party Site Remediation

REHOVAL AND ENGINEER TRENDY CN 028
PREPAREDHESS TO Trenton, NJ 08625-0028

TUBBLE - PROCESSES OF A SECOND PROCESSES OF

93 AUG -5 AMID: 58 DIRECTOR'S CAPICE

> Karl J. Delaney Director

Jeanne M. Fox
Acting Commissioner

July 30, 1993

George Pavlou, Acting Director Emergency and Remedial Response Division U.S. Environmental Protection Agency 26 Federal Plaza New York, New York 10278

Dear Director Pavlou:

Re: Removal Request - Newark Flatbed Trailer
411 Wilson Avenue
Newark, Essex County, NJ

The New Jersey Department of Environmental Protection and Energy (NJDEPE) hereby submits the Newark Flatbed Trailer site for CERCLA removal action consideration. The following information details the case history and supports the removal request.

The abandoned flatbed trailer was first discovered in July 1984 by the Newark Police Department. The police immediately contracted the C&J Towing Company (C&J) for the transport and temporary storage of the trailer pending legal action and disposal options against potential responsible parties. The trailer was found to contain approximately 800 bags of oxalic acid, an acid used as an analytical reagent in the manufacture of materials such as dyes, inks, bleaches, paint removers, varnishes and metal cleansers. Markings on the trailer indicated that Flexi Van Services of Secaucus, New Jersey could be a potential responsible party. Flexi Van Services leases trailers for the transport of materials.

The material remains on the C&J Towing Company's property which has moved to different operational locations several times in the past few years. C&J would like to resolve the past due towing and storage fees dating back to 1984 owed by the City of Newark. Flexi Van Services has also expressed an interest in gaining back their trailer, however, they refuse to cover the cost of disposal citing the final disposition of the oxalic acid as the responsibility of the party leasing the trailer which, to date, is unknown. A lack of communication between all parties involved as well as a refusal

to accept responsibility for the disposition of the material, has left the situation unresolved and the trailer virtually unattended for nearly ten years.

Oxalic acid is corrosive to the eyes, skin and mucous membranes which may result in ulceration. Chronic exposure to mist and dust has also been reported to cause chronic inflammation of the upper respiratory tract. At greatest risk are the employees of C&J Towing who work on a daily basis around the unsecured bags. The towing facility is also prone to frequent break ins, which heightens the possibility of a direct contact threat.

The Department, therefore, requests that EPA sample, characterize and dispose of the material abandoned on the trailer in such a way as to safeguard the health and safety of the local population.

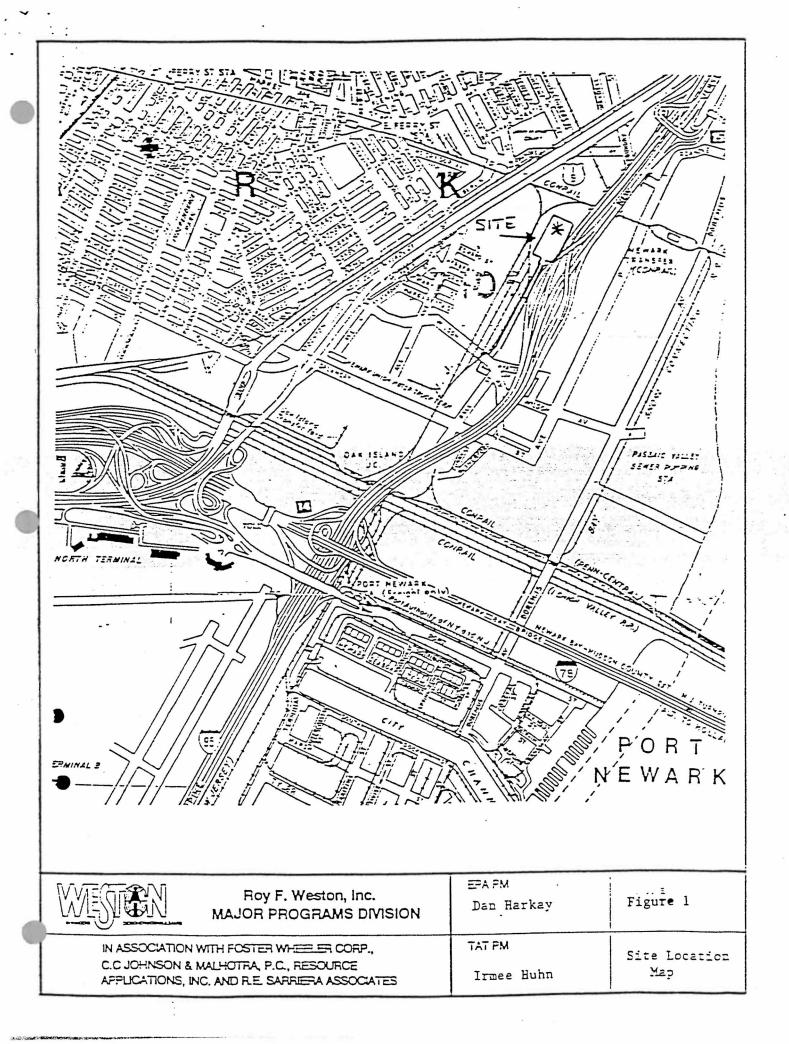
Should your staff require additional information, please have them contact David E. Triggs of the Bureau of Field Operations, Site Assessment Section at (609) 584-4280.

Sincerely,

Kaxi J. Delaney

C: Associate Director Salkie, Removal & Emergency Prepardness Program
Assistant Director Howitz, Discharge Response Element Chief Delikat, Bureau of Emergency Response Chief Van Fossen, Bureau of Field Operations Section Chief Yacoub, Metro Field Office

ATTACHMENT B



ATTACHMENT C

Additional Information

Relating to this Section

Can be Found in the

Confidential Files



DDDs 52.5111

52,5252 52.5115

OXALIC ACID, DIHYDRATE

MATERIAL SAFETY DATA SHEET

PRODUCT IDENTIFICATION

Product Name: Oxalic Acid, Dihydrate Chemical Name: Oxalic acid, dihydrate Synonyms: Ethanedioic acid Chemical Pamily: Organic acid Molecular Formula: C2H2O4 2H2O Product Use: Textiles bleaching/stripping; metal cleaning; tanning; laundry sour; etc

HAZARDOUS INGREDIENTS OF MATERIAL

Bazardous Ingredients

CAS No.

Oxalic acid

100 1 mg/m3 144-62-7

PHYSICAL PROPERTIES

Physical State: Solid
Appearance and Usour: Oxalic acid is a white crystal
Odour Threshold: Not available
Boiling Range (Deg C): Sublimes at 102 deg.C
Melting/Freezing Point (Deg U): 101.5 deg.C
Vapour Pressure: No data
Specific Gravity: 1.653 (20/4 deg.C
Vapour Density: Not applicable
Bulk Density: No data
Evaporation Rate: No data

Solubility: Soluble in water X Volatile by Volume: No data pm: No data Coefficient of Water/Oil Distribution: Not available

Sensitivity to Mechanical Impact: Not available Rate of Burning: Not available Explosive Power: Not available Sensitivity to Static Discharge: Not available

REACTIVITY DATA

Under Normal Conditions: Stable
Under Fire Conditions: Flammable
Hazardous Polymerization: Will not occur
Conditions to avoid: Avoid excessive amounts of heat and all possible
ignition sources
Haterials to avoid: Avoid alkalis, chlorites, hypochlorites, silver and
strong oxidizing materials
Hazardous Decomposition or Combustion Products: Formic acid, carbon monoxide
and carbon dioxide gases

SHIPPING DESCRIPTION (Under the TDG Act)

Shipping Name: Corrosive solids, poisonous, N.O.S.(Oxalic Acid)
Shipping Class/Division: 8,(6.1)
Product Identification No (PIN): UN 2923
Packing Group: II

PIRE AND EXPLOSION DATA

Flash Foint (Method): Not available Autoignition Temperature: No data Flammability Limits in Air (%): UKL: Not available available LBL: Not

Pire Extinguishing Media: Apply aqueous film forming foam (APFF) according to manufacturer's recommended techniques for large fires. Use carbon dioxide or dry chemical media for small fires. Use water only in the form of a fog.

Fire Fighting Procedures: Use water spray to cool fire-exposed containers or structures. Use water spray to disperse vapours; re-ignition is possible. Use self contained breathing apparatus and protective clothing.

Other Fire or Explosion Hozards: Not available

TOXTCOLOGICAL AND HEALTH DATA

Recommended Exposure Limit: 1 mg/m3

Toxicological Data: Ingestion of 5 grams of oxalic acid has caused death with symptoms of nausea, shock, collapse and convulsions coming rapidly

Carcinogenicity Data: Not available

Reproductive Effects: Not available

Mutagenicity Data: Not available

Teratogenicity Data: Not available

Eynergistic Materials: Not available

Effects of exposure when:

- . Inhaled: Dust may cause severe irritation of the nose, throat and respiratory tract.
- . In contact with the skin: Can cause severe burns either as dust or as solution. Prolonged skin exposure can cause dermatitis and slow-healing ulcers
- . In contact with the eyes: Can cause severe burns either as dust or as solution
- . Ingested: Ingestion of 5 grams has caused death with symptoms of nausea, shock, collapse and convulsions coming rapidly

Other Health Effects: Corrosive effects on the skin and eyes may be delayed, and damage may occur without the sensation or onset of pain. Strict adherence to first aid measures following any exposure is essential.

First aid procedures when:

. Inhaled: Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical advice immediately.

In contact with the skin: Flush skin with running water then continue flushing with running water for a minimum of 20 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

. In contact with the eyes: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

. Ingested: If victim is alert and not convulsing, give 1/2 to 1 glass of water to dilute material. IMMEDIATELY contact local poison control centre. Vomiting should be induced under the direction of a physician or a poison control centre. If spontaneous vomiting occurs, have victim leam forward with head down to avoid breathing in of vomitus, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.

Rmergency Hedical Care: Treat symptomatically.

PREVENTATIVE MEASURES

Recommendations listed in this section indicate the type of equipment which will provide protection against over exposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering Controls: General room ventilation

Respiratory Protection: A NIOSH/MSHA approved respirator, if required.

Skin Protection: Rubber, neoprene, vinyl gloves and apron

Eye Protection: Chemical goggles with face-shield

Other Personal Protective Equipment: Impervious apron and boots. Safety shower and eye bath located close to chemical exposure area.

Handling Procedures and Equipment: Not applicable

Storage Temperature (oC): See helov

Storage Requirements: Store in a cool, well ventilated area. Do not expose sealed containers to temperatures above 49°C (120°F). Keep away from heat, sparks and flower Reep tentainers closed.

Other Precautions: Use only with adequate ventilation. Avoid breathing vapour. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Wash contaminated clothing thoroughly before re-use.

ENVIRONMENTAL PROTECTION DATA

Steps to be taken in the event of a spill or leak: Stop and contain discharge by constructing barriers (dykes, lagoons) or applying inert sorbent (eg. sand, earth) for release to land, or by damming and water diversion if possible for release to vater. Collect product for recovery or neutralize. Collect neutralization sludge and contaminated soil and water for disposal.

Environmental Effects: Harmful to aquatic life at low concentrations. No quantitative data are available.

Deactivating Chemicals: Dissolve in water and adjust PH through addition of lime

Waste Disposal Methods: Dispose of waste material at an approved landfill site in accordance with local, provincial or federal regulations. Do not dispose of waste with normal garbage or in local sewage system.

ADDITIONAL INFOFMATION AND SOURCES USED

1. Calabrian Chemical Corp M.S.D.S. dated 9/29/86

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No varranty of any kind is given or implied and Explo will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years.

Date Issued: 88 08 10 Date Revised: 88 08 10 MSDS Index No: GCD 1100/88C



TECHNICAL REPORT FOR ROY F. WESTON, INC.

SAMPLES TAKEN AT: NEWARK CARGO BOX

CLIENT PROJECT ID:

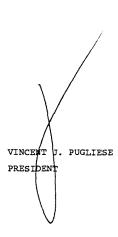
ACCUTEST JOB NUMBER:

SAMPLES RECEIVED AT ACCUTEST ON: NUMBER OF SAMPLES IN THIS REPORT:

TOTAL NUMBER OF PAGES IN REPORT:

934223

07/26/93





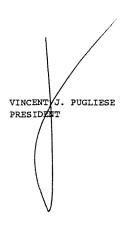
ROY F. WESTON, INC. 1090 KING GEORGES POST ROAD EDISON, NJ 08837 DATE: 07/29/93 JOB No: 934223 PROJECT No:

SAMPLE RECEIVED: 07/26/93

ATTN: ELIZABETH KELLY

SAMPLE SUMMARY

SAMPLE No	COLLECTED DATE TIME BY		ВУ	POINT OF COLLECTION
E319937	07/26/93		EK	OTHER-SOLID - S1, GRAB NEWARK CARGO BOX





ANALYSIS REPORT

SAMPLE NO	COLLECTED DATE TIME BY		BY	POINT OF COLLECTION
E319937	07/26/93		EK	OTHER-SOLID - S1, GRAB NEWARK CARGO BOX

TEST DESCRIPTION	RESULT	MDL	UNITS	DATE	INIT
SOLIDS, TOTAL PERCENT	76	2.0	8	07/27/93	MJL
рн	1.2		su	07/26/93	LMM

UG/KG = PPB MG/KG = PPM
MDL = METHOD DETECTION LIMIT
ALL RESULTS REPORTED ON A DRY WEIGHT BASIS

ENVIRONMENTAL PROTECTION AGENCY - REGION II ENVIRONMENTAL SERVICES DIVISION **EDISON, NEW JERSEY 08817**

Name of Unit and Address

1090 SUITE

Sample

Number

51 E315937 EDISON Number

•f

Container

201

ROY F. Weston, INC. 1090 KING GEORGES POST ROAD.

NJ 088 37

Description of Samples

934223

1: 5:2 T2 NEWARK CARGO BOX PHONE # 908-225-6116 FAX # 908-225-7037 CONTACT: ELIZABBH PERLY

> B:// to: Boy F. Weston, Inc. Casone address attn: Irmee Hoshe Huhn \$15.00 por K. Baker. 100

COMM A

8 02. jar, solid , for pH analysis, high concentration, grab sample

Person Assuming Responsibility for Sample 7/26/9/3 11:17 Reason for Change of Custody Sample Number 51 Accepted G- Analysis. 11:17 Sample Relinquished By: Received By: Time Date Reason for Change of Custody Number Sample Relinquished By: Time Date Reason for Change of Custody Received By: Number Sample : Relinquished By: Received By: Time Date Reason for Change of Custody Number

COMMUNITY RELATIONS PLAN

Newark Abandoned Cargo Trailer Newark, Essex County, New Jersey

Prepared for:

James D. Harkay U.S. EPA Region II Removal Action Branch Edison, New Jersey 08837

Prepared by:

Technical Assistance Team Roy F. Weston, Inc. Major Programs Division Edison, New Jersey 08837

November 1993

I. BACKGROUND

A. Site Description

On July 13, 1984, the Newark Police Department discovered the Newark Abandoned Cargo Trailer deserted at 141 North 13th Street, Newark, New Jersey. The trailer was labeled "UFCU2176492 Flexivan FLX2 42987, USA 4310". Approximately 800 bags of material labeled EXPLOS-Brasil S.A. and oxalic acid were found within the trailer. Under contract with the City of Newark, the C&J Towing Service towed the trailer to Orange Street, where it was parked at its facility in an industrial area. Since that time, C&J Towing has transported the trailer to two separate storage locations. The trailer is currently stored at C&J's yard located at 411 Wilson Street, Newark.

The C&J Towing facility is bordered by a scrap metal yard approximately 400 feet to the west, the New Jersey Turnpike approximately 300 feet to the east, an adjoining towing facility to the northwest, and vacant land to the north and south. The trailer is located approximately 600 feet south of the main entrance to the C&J Towing facility and 30 feet from the east fence line.

B. National Priorities List (NPL) Designation

The Newark Abandoned Cargo Trailer is currently not on the NPL.

II. THREAT

A. Threat of Public Exposure

The cargo trailer contains approximately 800 fifty-pound bags of oxalic acid. The pH of the chemical has been determined to be 1.2. Approximately 30 bags, located near the back door of the trailer, have been exposed to the elements and have deteriorated resulting in spillage of the oxalic acid into the environment. The material, if left exposed to the elements will further deteriorate through exposure to sunlight, rain, wind and snow, the oxalic acid will continue to be released into the environment. Furthermore, any mechanical disturbance of the cargo trailer may cause entire bags of the acid to fall onto the ground surface.

B. Extent of Contamination

Presently, the contaminants are primarily contained within the trailer, but due to the poor condition of the back doors, the potential threat to the environment exists through the migration of hazardous substances from the trailer, if disturbed, resulting in a release of the contaminants onto the ground surface area.

C. Previous Actions to Abate Threat

No previous actions have been taken to abate threat.

D. Current Actions to Abate Threat

Currently, Region II EPA has obtained funding for the Removal Action and the Emergency Response Cleanup Services (ERCS) contractor has obtained bids for recycling the majority of the material and has set up disposal for the unpackaged material and is preparing for mobilization.

III. PROPOSED PROJECT

A. Objective of the Project

The objective of the project is to eliminate the threat currently posed by the contaminant contained in the trailer. The proposed mitigative measures will address the recycle and disposal of the contaminant material.

B. Project Tasks

Removal of hazardous substances, pollutants and contaminants to off-site RCRA disposal facilities is the only feasible solution for mitigating the threat that exists at the site. Site stabilization without disposal would merely provide a temporary solution. The removal action will address the recycle and disposal of the oxalic acid, and cleaning of the trailer. The ERCS contractor will remove and repackage any damaged material. The palletized material will be removed from the cargo trailer to the transport trailer. Afterwards, ERCS will decontaminate the interior of the trailer and leave it on site for scrap. Transportation and disposal of the contaminants will be performed in accordance with Department of Transportation (DOT) and RCRA regulations.

C. Objective of the Community Relations Plan

- 1. Provide accurate and concise information to interested citizens, elected officials and media.
- 2. Coordinate local, state, and federal response teams.
- Assist with public acceptance of the chosen response action.
- 4. Enlist the assistance of local officials as needed.

The groups to whom the plan is directed are: citizens, citizen groups, local school officials, local businesses, elected officials, and local, state and federal agencies working in accordance with Region II EPA.

D. Community Relations Activities

Date (s)	<u>Activities</u>	<u>Objective</u>	<u>Staff</u>
As needed	Meetings with state, county, and local officials	To develop local local contingency plans	osc
As needed	Distribute fact sheets	Inform public of removal progress	osc
As appropriate	Attend meetings of community action group	Inform Community groups of removal progress	osc

E. Key Officials and Contacts

Federal Agencies

Federal Elected Officials Senator Bill Bradley	Phone #
Washington, DC Office Senate Office Building Washington, DC 20510-3202	(202) 224-3224
<u>District Office</u> Box 1031 Blackhorse Pike and Whitman Drive Turnersville, New Jersey 08012	(609) 228-2815
Senator Frank R. Lautenberg	
Washington, DC Office Senate Office Building Washington, DC 20510-3201	(202) 224-4744
<u>District Office</u> 970 Broad Street Newark, New Jersey 07102	(201) 645-3030
Congressman Robert Menendez	
<u>Washington, DC Office</u> 1531 Longworth Bldg Washington, DC 20515	(202) 225-7919
<u>District Office</u> 654 Avenue C Bayonne, New Jersey 07002	(201) 823-2900

State Elected Officials

State Senator Dr. Wynona M. Lipman, 50 Park Place, Suite 1035 Newark, New Jersey 07102	(201)	622-0007
State Assemblyman Willie B. Brown 1081 Bergen St. Newark, New Jersey 07112	(201)	926-4494
State Assemblyman Jackie R. Mattison 1072 Bergen St. Newark, New Jersey 07112	(201)	705-3595
Bruce Siegel, M.D., Commissioner State Department of Health John Fitch Plaza CN 360 Trenton, New Jersey 08625	(609)	292-7837

County Officials

Essex County Office Building (201) 621-5000 Hall of Records 469 Kings Blvd Newark, New Jersey 07102

Michael Duffy, Public Health Coordinator (201) 228-8200 Essex County Department of Health 94 William St.
Newark, New Jersey 07102

Local Officials

Sharpe James, Mayor (201) 733-6400 City Hall 920 Broad Street Newark, New Jersey 07102

Newark Municipal Council

Ralph T. Grant, Jr. Marie L Villani	Donald Tucker
S. Ward: Donald Bradley	N. Ward: Anthony Carrino
E. Ward: Henry Martinez	W. Ward: Ronald L. Rice
Central: George Branch	

Newspapers

Star Ledger 1 Star Ledger Plaza
Newark, New Jersey 07095
(201) 877-4141

Radio

WNJR-1430 AM 1 Riverfront Plaza Newark, New Jersey 07102	(201)	642-8000
WBGO-88.3 FM 54 Park Place Newark, New Jersey 07102	(201)	642-8880
WMGQ-98.3 FM 78 Veronica Ave. New Brunswick, New Jersey, 08901	(908)	545-8275

Television

WWOR Television
Channel 9
9 Broadcast Plaza
Secaucus, New Jersey 07096
(201) 348-0009

NOTICE OF PUBLIC AVAILABILITY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ANNOUNCES THE AVAILABILITY OF THE NEWARK ABANDONED CARGO TRAILER REMOVAL ADMINISTRATIVE RECORD FILE NEWARK, ESSEX COUNTY, NEW JERSEY

The U.S. Environmental Protection Agency (EPA) announces the availability for public review of documents comprising the Newark Abandoned Cargo Trailer administrative record file for the selection of the removal action at the Newark Public Library. EPA seeks to inform the public of the availability of the record file at this repository and to encourage the public to comment on documents as they are placed in the record file.

The administrative record file includes documents which form the basis for the selection of a removal action at this site. Documents now in the record files include, but are not limited to, the site assessment report, Action Memorandum, and Community Relations Plan. Other documents could be added to the record files as site work progress. These additional documents may include, but are not limited to, technical reports, additional validated sampling data or field testing results, comments and new data submitted by interested persons, and EPA responses to significant comments. No further announcement of availability will be made.

The administrative record file is available for review during normal business hours at:

Newark Public Library New Jersey Division 5 Washington Street Newark, N.J. 07102 Phone (201) 733-7784

EPA - Region II and Removal Action Branch 2890 Woodbridge Avenue Bldg 209 Edison, New Jersey 08837 Phone (908) 321-6614

Additional information is available at the following locations:

Guidance documents and Technical Literature

EPA Region II Central Library 2890 Woodbridge Avenue

Bldg 209

Edison, N.J. 08837 Phone (908) 321-6762

A public comment period will extend thirty (30) days from the date this notice appears in print. At the end of the thirty (30) day comment period, a written response to all pertinent comments will be prepared in a responsiveness summary and will be placed in the record file. Written comments on the administrative record should be sent to:

> U.S. EPA - Region 2 External Programs Division Jacob Javits Federal Building New York, N.Y. 10278



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

EDISON, NEW JERSEY 08837

EPA REGIONAL GUIDANCE DOCUMENTS

The following documents are available for public review at the EPA Region II Headquarters, Raritan Depot, Woodbridge Avenue, Edison, New Jersey during regular business hours. Contact Douglas Kodama at (908) 906-6905 for more information.

- * Glossary of EPA Acronyms.
- * Superfund Removal Procedures--Revision #3. OSWER Directive 9360.0-03B, February 1988.
- * Hazardous Waste Operations and Emergency Response. Notice of Proposed Rulemaking and Public Hearings. 29 CFR Part 1910, Monday, August 10, 1987.
- * Guidance on Implementation of Revised Statutory Limits on Removal Action. OSWER Directive 9260.0-12, May 25, 1988.
- * Redelegation of Authority under CERCLA and SARA. OSWER Directive 9012.10, May 25, 1988.
- * Removal Cost Management Manual.
 OSWER Directive 9360.0-02B, April, 1988.
- * Field Standard Operating Procedures (FSOP).
 - #4 Site Entry.
 - #6 Work Zones.
 - #8 Air Surveillance.
 - #9 Site Safety Plan.
- * Standard Operating Safety Guides -- U.S. EPA Office of Emergency and Remedial Response, July 5, 1988.
- * CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Superfund).
- * SARA: Superfund Amendments and Reauthorization Act of 1986.
- * NCP: National Oil and Hazardous Substances Pollution Contingency Plan.